

GridMonitor: Integration of Massive Facility Fabric Monitoring with Meta Data Service in Grid Environment*

RHIC/USATLAS Computing Facility
Department of Physics
Brookhaven National Lab
Upton, NY 11973, USA

Abstract

Grid computing consists of the coordinated use of large sets of diverse, geographically distributed resources for high performance computation. To monitor these Grid computing resources and provide Grid information service becomes extremely important for efficiently using Grid Computing resource. The large numbers of computing entities with great diversities make the task extremely challenging. In this work, we describe a Grid Monitoring Architecture which captures the most important characterization from large facility monitoring. The GMA consists of four tiers: local monitoring, archiving, publishing, harnessing. This architecture was applied to large scale of linux farm and network infrastructure. It can also be used by other higher-level grid services, i.e. scheduling service, resource brokering.

Keywords: Grid Monitoring (GridMonitor), Grid Monitoring Architecture (GMA), Monitoring and Discovery Service (MDS).

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